Skills Bootcamp in Virtual Production with Sony VENICE 2 Curriculum Plan

WEST OF ENGLAND Combined Authority

Course Details	
Lead Provider	University of Bristol
Embedded Qualifications (including Awarding Body)	Not credit bearing. All the learners will have an opportunity to complete SONY's accreditation test for the VENICE 2 cameras – if they pass this test they will receive a Certificate of accreditation as a camera operator for Sony's VENICE 2.
Guided Learning Hours GLH (Contact)	60 hours Several of our network have kindly agreed to offer open studio visits to their own facilities for the learners on this Skills Bootcamps. These visits will take place during the Skills Bootcamp – we are currently working to determine dates for when these will be offered. It will be expected that each learner on the Skills Bootcamp will engage with at least one in person open studio visit. Each learner will also be offered mentoring with Gritty Talent to support their career development This will be flexibly arranged around your and staff availability.
Non-GLH (Non-contact)	Varied depending on how many "extra" hours you can/want to put into developing your skills and knowledge further in addition to the GLHs. Education materials, software and further online links/videos will be made available through the University's Virtual Learning Environment, to engage with outside of the GLHs but there will be no assumption made that you will be able to have the time commitment to engage with this material outside of the GLHs.

The information provided below is intended to provide an indicative curriculum of the Skills Bootcamp in Virtual Production with Sony VENICE 2. The University of Bristol and delivery partners reserve the right to change the curriculum and delivery format.

Skills Bootcamp in Virtual Production with Sony VENICE 2 Curriculum Plan

Week 1	**Monday 9 December - Welcome and Induction (½ day In person)** *Introduction to the course to settle learners in and make sure they are aware of the structure of the Skills Bootcamp, a reminder of the expectations of them as learners and what they can expect from the educational delivery team, and all the support provided (both as directly part of the Skills Bootcamp itself but also the wider University of Bristol as a registered student).* *We will also be inviting some guest speakers from our network to speak about the impact Virtual Production has had on their work and workflows to get the learners all excited about their own careers upon completion of the Skills Bootcamp.* **Wednesday 11 December - Empowering Tomorrow** - cultivating inclusive collaboration and future skills **(½ day Online)** *In this session we explore the role of equity, diversity and inclusion in creative collaboration and delve into the skills necessary to thrive in 2025.*
Week 2	**Sony VENICE 2 Training (In Person 3 days)** For the practical hands-on parts of the VENICE 2 training sessions, we will break into two smaller groups to maximise everyone's use of the VENICE 2 cameras, so you may not be required to attend all day on the three dates below. We will confirm with learners the exact timings they will be required to attend on these three dates upon acceptance on the course. **Tuesday 17 December, Wednesday 18 December and Thursday 19 December** This part of the course will show you how to become an accredited Sony VENICE 2 operator. You will learn the function and operation of every control, indicator and connector. You will also see how all the camera's menus work and how they affect the camera's operation. You will learn how to shoot creatively with a VENICE camera and how to work with the recorded files. Accreditation test Upon completion of this part of the course learners will be issued with an accreditation test. If they pass this test run by SONY they will be provided with a Certificate of Accreditation which proves a good operational understanding of the VENICE 2 camera. An Introduction to VENICE 2

Week 2	This part of the course introduces the camera, its target user and intended shooting scenarios. This includes: • Camera construction, form factor & modular design. • The VENICE 2 sensor and shooting options. • Selecting and using media. • Shooting RAW, X-OCN, S-Iop3, and proxies. • Common accessories, setups, and licensed options. • Explanation of all the formats available. • HDR functionality. • Anamorphic de-squeeze in all formats. • 6:5 anamorphic mode. • S709 monitoring. • Setting up frame lines. • Gyro display and recording. **VENICE 2 colour science and sensor** This part of the course explains the colour science and dynamic range aspects of VENICE 2. This includes: • Understanding the CIE colour space diagram. • The VENICE 2 native gamut and colour spaces. • Understanding latitude. • How colour and dynamic range are captured. • Setting up and using Dual Base ISO and latitudes. • How LUTs work with VENICE 2. • Introduction to X-OCN and data rates. • Using a data rate calculator. • ART files & generating ART Plus with RAW viewer. **VENICE 2 controls, indicators & connectors** This part provides a detailed explanation of every VENICE camera control, indicator and connector. This includes: • Providing power and switching on VENICE 2. • Video and audio controls and connectors. • Connecting a viewfinder. • Remote and network control operations. • Introduction to Live mode, using an RCP and RM. **VENICE 2 lens mount and extension options** This part takes a look at the VENICE two lens mount and CBK-3610XS extension options. This includes:

	• The VENICE PL and E mount options. • The sensor position and ND Fiter controls. • Using adaptors and extenders. • Using the VENICE CBK-3610XS extension system. **The VENICE 2 menu structure** This part provides a detailed technical explanation of every menu item in the VENICE 2 camera. This includes: • Operating the Sub Display and Mini Display. • Using the Home, User Functions, Basic & Full menus. • Selecting a shooting mode and recording format. • Controlling video & audio outputs and monitoring. • Controlling colour, dynamic range and look. • Controlling the technical aspects of VENICE 2. • Performing a factory reset and setting defaults.
Week 2	**VENICE 2 setup and recording operations** This part shows how to set up VENICE 2 ready for a shoot and how to make recordings. This includes: • Viewfinder & on-set monitoring, using Hi-Low Key. • VENICE 2 genlock. • Setting up recoding modes and formats. • Saving camera configurations on an SD Card. • Continuous recording with VENICE 2. • Setting up simultaneous hi-res/proxy recording. • Recording with high ISO (Dual Base ISO). • Performing picture cache recording. • Setting up record review and using false colour. • Setting up and using Focus Magnifier. • Using exposure controls & aids. • Using Double Speed Scan function. **Clip operations and playback with VENICE 2** This part of the course explains how VENICE 2 folders and clips are named, and how to initialise clip naming at the beginning of a project. This includes: • VENICE 2 clip metadata. • Accessing & understanding Clip List. • Selecting and reviewing AXSM or SxS clips. • Switching media & adopting a secure backup policy.

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Week 2	**Understanding errors, warnings and cautions** This part explains some of the errors and warnings that may occur then using VENICE 2, and some of the cautionary messages VENICE 2 can provide. This includes: • Understanding error codes, warnings & cautions. • Handling media, power and temperature warnings. • Fan removal and cleaning. • Hands-on of VENICE 2, CBK-3610XS, etc. **Workflow operations** This part of the course will show how to post-produce and otherwise process VENICE 2 recordings. This includes: • Practical fleet of Colour Space. • Monitors and HDR settings. • Card readers, AXS Utility & data management. • Using RAW Viewer. • Effects of under and over exposure on material. • Essential colour correcting with X-OCN and Resolve. • Working with S-Iop3 material. • Using LUTs, for a consistent look from set to post. • Generating ART files and using them in the camera. • Essential VENICE recording trading techniques.
Week 3	**Friday 3 January 2025 (½ day Online)** Introduction to Virtual Production (VP) & In Camera VFX (ICVFX) • How VFX evolved into Virtual Production. *The history of the technological advancements in filmmaking will be discussed, to provide a contextual understanding of the development of virtual production and its significance to the advancement of the industry.* • What is Virtual Production? *An overview of key elements of Virtual Production will be detailed and presented to provide a foundational understanding of this discipline.* *A showcase montage will be shown of the variety of virtual production applications and types of productions that are applying virtual production to their projects.* The ICVFX / VP Onset Team Roles & Responsibilities - Pre-Production & Onset • Overview of each role and their responsibilities within the VP

Week 3	team *The numerous roles involved in Virtual Production will be detailed and discussed, including the responsibilities of the role holders and how they all fit together in the VP team.* • On Set Responsibilities *The On Set experience and 'chain of command' is specifically detailed and discussed by reviewing the organisational chart on a variety of virtual productions with real world examples (HETV, Film, Documentary, Music Video). Students will participate in breakout sessions to workshop a real scenario and design the virtual production team required based off the production requirements.* • Core Competencies - soft skills and technical competencies. *The core competencies required to be a successful crew member of a Virtual Production will be detailed and discussed, with differentiation between critical and advantageous skills.*
Week 4	**Monday 6 January 2025 (½ day Online)** The Virtual Production & ICVFX Content Workflows • The Content Approaches for Virtual Production *Understanding and exploring in detail the key approaches utilised for the creation of the digital environments to be displayed on the volume. This will cover the three main approaches typically used within commercial productions today. Exploring the pros and cons of each, understanding their limitations and when one should be used over another.* *A masterclass case study presented by an industry expert in Virtual Production will provide real-world examples of these approaches in practice.* **Tuesday 7 January 2025 (½ day Online)** How to successfully produce a Virtual Production shoot • VP Producer panel shares their experience and top tips *A range of VP Producers will present their experience and top tips to effectively schedule, budget and produce a virtual production shoot. This will provide an overview of key workflows from concept to completion. A forum for Q&A will allow students to gain information directly from experts. This section will also feature key introductions to roles from outside of the Virtual Production studio team such as gaffers, Art Directors and DOP's to provide critical areas of consideration, outside of content production, for producers*

Week 4	*when undertaking a VP shoot.* *A masterclass deep dive case study presented by an experienced VP Producer will provide a clear real-world example to bring these insights to life.* **Wednesday 8 January 2025 - Career Mapping Workshop -** *navigating your career path and crafting the perfect cv.* **(½ day In Person)** We create a physical career map with a five-year plan to visualise career goals and address barriers. In a CV masterclass facilitated by a leading talent manager, we learn how to make your cv stand out from the crowd.
Week 5	**Monday 10 February - Meet the Volume (Full day In person)** • **VP Systems Introduction** *The technology systems that make up the Volume will be thoroughly explained, and participants are able to move around within the Volume and interact with the key elements to build familiarity ahead of the demos.* • **Camera Tracking Introduction** *A more detailed discussion of camera tracking with live 'hands-on' experience with the hardware and software components.* • **Media Server Introduction** *A more detailed discussion of the importance of media servers with live 'hands-on' experience with the hardware and software components.* • **Virtual Production Communications On Set** *A practical 'On Volume' walkthrough of the key communication hierarchies when working with large crews to deliver a virtual production.* **Tuesday 11 February - 2D Plate Live Demos (Full day In person)** • **2D Content workflow recap from online sessions** *The learnings made on the online session will be refreshed and reinforced. Connections are drawn between the Sony training, and the 'hands on demonstrations' that the students will take part in.* • **Top DOP tips for shooting on an LED stage** *A seasoned DOP will share their experience of shooting on an LED stage, and the key learnings they have made. An open Q&A session will ensure the participants gain real-world insights to*

Week 5	*bolster the technical skills gained in the Sony Venice training module.* • **Live Virtual Production Demos - 2D Plate Playback** *A real virtual production film shoot will be undertaken. Participants will get hands-on: forming production company style teams, be supplied with plate scenes and props to work with and create mini scripts for shooting using the techniques and tools they have learned in the training. The teams will be supplied with a Sony Venice camera & lighting kits with support from the studio VP team in order to undertake a live virtual production and ICVFX shoot.* **Wednesday 12 February - 3D Real-time Live Demos (Full day In Person)** • **Using Unreal Engine scenes in a Virtual Production shoot** *An experienced Unreal Engine Operator and VP Supervisor will outline an overview of Unreal Engine as a digital environment creation tool, the VP toolset within Unreal Engine, Virtual Art Department (VAD) Basics alongside the Basic Principles of Creating Content for VP, how to optimise and measure performance. Key softwares will be detailed and discussed.* • **Camera Specialist Expert Panel discussion around cinematography for Virtual Production** *MARS Academy team will participate in an expert panel discussion, breaking down an Unreal scene as it relates to the DOP role, making links and reinforcing the learnings made on the Sony Venice training module.* • **Live Virtual Production Demos - 3D Real-time Playback** *A real virtual production film shoot will be undertaken. Participants will get hands-on: forming production company style teams, putting into practise the Key Camera & DOP skills they have learned in the prior Sony Venice training. The teams will be provided with an optimised Unreal Engine scene (digital environment) and using props they have sourced to compliment the scenes, they will generate mini scripts for shooting using the techniques and tools they have learned in the training. The teams will be supplied with camera & lighting kits with support from the studio VP team to undertake a live virtual production shoot.* • **Expert panel review** *Members of our MARS Academy team will participate in a panel discussion of the students project work, providing feedback to each team's live virtual production shoot. A Q&A session will be facilitated to reinforce the learnings.*

	Thursday 13 February – Friday 14 February - Flexible time within the MyWorld facilities for development of your personal Unreal and VP project
Week 6	**Monday 17 February – Tuesday 18 February - Flexible time within the MyWorld facilities for development of your personal Unreal and VP project** **Wednesday 19 February - Connections and Conversations** - *networking and interviewing for career success.* **(½ day In Person)** • In this practical session we share tips to strengthen your network and help secure future work. You will learn how to deliver a winning interview and put the technique into practise with your peers. **Thursday 20 February - Flexible time within the MyWorld facilities for development of your personal Unreal and VP project** **Friday 21 February – Networking event across both Skills Bootcamps, with opportunity to show learners' work. (½ day In person)** • Guests from our network will also be invited so that they can see learners work and provide a networking opportunity.
Week 7	**Wednesday 26 February – Embracing Inclusive Leadership** - *communication and conflict resolution for stronger teams* **(½ day Online)** • Whether leading a whole team or just one person, the principles of inclusive leadership will create harmonious teams. We share ideas on what makes a good leader and techniques for resolving challenges.
Week 8	**Monday 10 March – Meet the Employers** – *face-to-face networking event in Bristol* **(½ day In Person)** • The sessions culminate in an in-person networking event. We match you with the most relevant local employers and facilitate exclusive ten-minute chats with multiple contacts.